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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/950,078	09/12/2001	Yuichi Hoshiyama	2001_1297A	1558

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EXAMINER

HOOLAHAN, AMANDA J

ART UNIT PAPER NUMBER

2859

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/950,078

Applicant(s)

HOSHIYAMA, YUICHI

Examin r

Amanda J Hoolahan

Art Unit

2859

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other:

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-4 are objected to because of the following informalities: In claim 1, line 8, there is no prior antecedent basis for the bearings mentioned. For further examination of claim 1, the examiner will assume the Applicant meant "legs" as mentioned previously in the claim. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable by USPN 5,232,321 to Suzuki in view of USPN 5,569,003 to Goldman et al. [hereinafter Goldman].

Numerals W and Z have been added to Figure 1 in reference to certain components of the device disclosed by Suzuki. See copy attached at the end of this action.

Suzuki discloses an apparatus for engraving images which comprises a controller (J); a base plate (D) having a given thickness and width, on which a II-shaped driving stand having a pair of legs (15, 15') is rigidly mounted, said each leg having an opening provided through a central portion thereof; a spindle (21) being penetrated through the openings of said legs with a pair of coil springs (W, Z) to extend horizontally and in parallel with the base plate to form a

Art Unit: 2859

vibration-preventing unit, each coil spring being located between said leg and a pair of bearings (16) mounted slidably on said spindle to reciprocate; a second base plate (13) integrally mounted on the top portion of each bearings; a pair of driving (22) and driven pulleys (22) provided on a pair of blocks (25, 29) mounted on the second base plate; a timing belt (23) engaged on said pulleys; an x-axis feeder (31) provided on said timing belt and said  $\Pi$ -shaped rail; an x-axis pulse motor driver (14) and an x-axis pulse motor (M1) connected to said x-axis feeder; a y-axis driver (6) connected to the controller; a y-axis pulse motor driver (9) connected to an x-axis pulse motor; a z-axis driver (3) provided on a head base (2), which is a top portion of the y-axis driver; a z-axis driver (25) including a z-axis head driver and a z-axis head; a stylus (G') provided at the lower portion of the z-axis head; a minute  $\Delta$ y-axis driver (11) having a y-axis head driver and a  $\Delta$ y-axis head connected to said stylus; and a y-axis driver comprising a tilt pulse motor driver (23) and a tilt pulse motor (M3) disposed at a front portion of the y-axis driver in such a manner that when an adaptor is tilted rearwards, an engraved media such as a passport or an identification card ID can be easily placed on the adaptor.

Suzuki does not disclose the apparatus wherein the controller is connected to a personal computer.

Goldman discloses an engraving apparatus having a controller (20) connected to a personal computer (10). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to control the apparatus, disclosed by Suzuki, with a personal computer, as taught by Goldman, in order for the apparatus to be automatically controlled since there is a risk for human error when controlling the movement of the sliding table with an eccentric cam.

4. Claims 2-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki and Goldman as applied to claim 1 above, and further in view of USPN 5,504,301 to Eveland.

Suzuki and Goldman disclose the apparatus as described above in paragraph 3.

Suzuki and Goldman do not disclose an adaptor for use in said apparatus comprising a rectangular table having a given thickness and width being put on the feeder, said rectangular table having a positioning rectangular groove provided near an outer periphery of the said rectangular plane which is defined by the rectangular groove and dented slightly for about 0.1 mm, a pair of small air openings provided through the adaptor to locate at the upper and lower grooves, an air hose being disposed at a backside of said table, one end portion of said air hose being put in to the air opening from a backside and another end being connected to a vacuum pump in order to hold an identification through a negative pressure of air.

Eveland discloses an engraving apparatus comprising an adaptor for use in said apparatus comprising a rectangular table (11) having a given thickness and width, a holding table (16), and an inclined table (52) which is rigidly secured to one edge portion of the holding table, a lid plate (21) which is pivotally secured to another edge portion of the inclined table, said rectangular table having a positioning groove (14) provided near an outer periphery of the said rectangular plane which is defined by the groove, a pair of small air openings (41, 42) provided through the adaptor to locate at the upper and lower grooves, an air hose (40) being disposed at a backside of said table, one end portion of said air hose being put in to the air opening from a backside and another end being connected to a vacuum pump (19) in order to hold an identification through a negative pressure of air, a rectangular window (36) being provided through the lid plate in order

Art Unit: 2859

to correspond with the rectangular dent portion, a pair of clips (column 7, lines 29-31) being provided at both corner portions of the inclined portions, and a pair of grips (33) being mounted at both upper and lower portions of an outer edge portion of the lid plate. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the adaptor assembly, as taught by Eveland, to the engraving apparatus, disclosed by Suzuki and Goldman, in order for the apparatus to be able to have a better hold on the item being engraved.

With respect to the rectangular table being dented slightly for about 0.1 mm: Eveland discloses the rectangular table being slightly dented (see Figure 1) but does not disclose to what degree the table is dented. However, to choose the dent in the rectangular table to be about 0.1 mm, absent any criticality, is only considered to be the "optimum" value of the dent in the rectangular table, as stated above, that a person having ordinary skill in the art would have been able to determine using routine experimentation based, among other things, on the desired indentation and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. See *In re Boesch*, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the indentation, disclosed by Suzuki and Eveland above, to be 0.1mm in order for the device to have better suction on the item being engraved.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 3,925,602 to Doi et al., USPN 3,803,979 to Young, USPN 5,493,965 to

Art Unit: 2859

Lizarazu, and USPN 5,512,005 to Gulling disclose engraving apparatus' comprising X, Y, and Z motors and drivers, a controller, and a base plate.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda J Hoolahan whose telephone number is (703) 308-0139.

The examiner can normally be reached on Monday through Friday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F Gutierrez can be reached on (703) 308-3875. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ajh  
January 20, 2004



Diego Gutierrez  
Supervisory Patent Examiner  
Technology Center 2800

**CHRISTOPHER W. FULTON**  
**PRIMARY EXAMINER**